AMENDMENTS TO THE CLAIMS

The following listing of Claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-57. (Cancelled)

58. (New) A method for reading at least one optical code comprising:

operating a scanning system in a first mode comprising generating light, and redirecting the light for generating a first set of scan lines for scanning a target optical code, said first set of scan lines including at least a first and second scan line, wherein the first and second scan lines have different orientations;

operating the scanning system in the second mode comprising generating light, and redirecting the light for generating a second set of scan lines for scanning the target optical code, said second set of scan lines including at least one scan line, wherein the second set of scan lines includes less scan lines than the first set of scan lines;

detecting light of at least one of the first set of scan lines and the second set of scan lines reflected from the target optical code and generating corresponding signals; and

decoding the corresponding signals for reading the target optical code.

59. (New) The method according to Claim 58, wherein the second set of scan lines includes a subset of the first set of scan lines.

60. (New) The method according to Claim 58, further comprising receiving a request signal, wherein enabling of the decoding is controlled in accordance with the request signal.

61. (New) The method according to Claim 60, wherein when operating the scanner system in one of the first and second modes, the decoding is selectively enabled in accordance with the request signal, and when operating the scanner system in the other of the first and second modes the decoding is only enabled or disabled.

62. (New) The method according to Claim 58, wherein the second set of scan lines includes only one scan line.

63. (New) The method according to Claim 58, further comprising:

receiving a parameter request; and

selecting the at least one scan line included in the second set of scan lines in accordance with the parameter request.

64. (New) The method according to Claim 63, further comprising operating in a third mode, wherein the selecting the at least one scan line is performed when operating in the third mode.

65. (New) The method according to Claim 58, wherein the second set of scan lines includes at least two parallel lines.

66. (New) The method according to Claim 58, further comprising:

reading an input optical code by the scanner system; and

selecting to operate in the first mode or second mode of operation;

wherein the input optical code includes at least one input request selected from the group consisting of a mode selection request and a parameter request; and

wherein the selecting to operate in the first mode or second mode of operation is in accordance with the mode selection request, and the at least one scan line included in the second set of scan lines is determined in accordance with the parameter request.

67. (New) An optical code scanning system comprising:

means for generating scan lines for scanning a target optical code;

means for detecting light of the generated scan lines reflected from the target optical code and generating corresponding signals; and

at least one processor having:

means for operating the scanning system in at least a first and second mode, wherein:

when operating in the first mode the means for generating scan lines generates a first set of scan lines including at least a first and second scan line, wherein the first and second scan lines have different orientations; and

when operating in the second mode the means for generating scan lines generates a second set of scan lines including at least one scan line, wherein the second set of scan lines includes less scan lines than the first set of scan lines; and

means for decoding the corresponding signals for reading the target optical code.

68. (New) The scanning system according to Claim 67, wherein the second set of scan lines includes a subset of the first set of scan lines.

69. (New) The scanning system according to Claim 67, the at least one processor further comprising:

means for receiving a request signal; and

means for enabling the decoding;

wherein the means for enabling the decoding is controlled in accordance with the request signal.

70. (New) The scanning system according to Claim 69, wherein the means for decoding is controlled in accordance with the received request signal only when operating in one mode of the first and second modes.

71. (New) The scanning system according to Claim 67, wherein the second set of scan lines includes only one scan line.

72. (New) The scanning system according to Claim 67, the at least one processor further comprising:

means for receiving a parameter request; and

means for selecting the at least one scan line included in the second set of scan lines in accordance with the parameter request.

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73. (New) The scanning system according to Claim 72, wherein the at least first and second mode includes a third mode, and the selecting the at least one scan line is performed when operating in the third mode.

74. (New) The scanning system according to Claim 67, wherein the second set of scan lines includes at least two parallel lines.

75. (New) The scanning system according to Claim 67, further comprising one single-position actuator responsive to at least one user action for generating a user request signal, wherein the user request signal controls at least one of the means for operating for selecting the mode of operation, and enablement of the means for decoding.

76. (New) The scanning system according to Claim 67, the at least one processor further comprising:

means for processing an input optical code read by the scanner system; and

means for selecting to operate in the first mode or second mode of operation;

wherein the input optical code includes at least input request selected from the group consisting of a mode selection request and a parameter request; and

wherein the means for selecting selects the mode of operation is in accordance with the mode selection request, and the at least one scan line included in the second set of scan lines is determined in accordance with the parameter request.

77. (New) An optical code scanning system comprising:

means for generating at least one scan line for scanning a target optical code;

a photo sensor for detecting light of the at least one scan line reflected from an optical code and generating corresponding signals; and

at least one processor having:

a means for controlling the means for generating at least one scan line for operating the scanning system in at least a first and second mode;

wherein when the scanning system operates in the first mode the means for generating at least one scan line generates a first set of scan lines including at least a first and second scan line, wherein the first and second scan lines have different orientations; and

wherein when the scanning system operates in the second mode the means for generating at least one scan line generates a second set of scan lines including at least one scan line, wherein the second set of scan lines includes less scan lines than the first set of scan lines; and

a decoder for decoding the corresponding signals for reading the target optical code.

78. (New) The scanning system according to Claim 77, wherein the means for generating at least one scan line includes a light source for generating light; and means for redirecting the generated light.

79. (New) The scanning system according to Claim 78, wherein the means for controlling controls at least one of the light source and the means for redirecting.

80. (New) The scanning system according to Claim 77, wherein the second set of scan lines includes at least two parallel scan lines.

81. (New) The scanning system according to Claim 77:

wherein the at least one processor further includes means for receiving a request signal;

wherein the decoder generates at least one decode signal corresponding to the decoding, transmits the at least one decode signal for further processing thereof; and

wherein the decoder is enabled for at least one of the decoding, generating and transmitting of the at least one decode signal in accordance with the request signal.

82. (New) The scanning system according to Claim 77, further comprising one single-position actuator responsive to at least one user action for generating a user request signal, wherein at least one of the means for controlling and the decoder is controlled in accordance with the user request signal.

83. (New) The scanning system according to Claim 77, wherein the second set of scan lines includes a subset of the first set of scan lines.

84. (New) The scanning system according to Claim 77, wherein the second set of scan lines includes only one scan line.

85. (New) The scanning system according to Claim 77, the at least one processor further comprising means for receiving a parameter for selecting the at least one scan line included in the second set of scan lines.

86. (New) A method for scanning an optical code comprising:

generating at least one scan line for scanning a target optical code;

detecting light of the at least one scan line reflected from an optical code and generating corresponding signals;

controlling the generating the at least one scan line for operating the scanning system in at least a first and second mode;

wherein when operating in the first mode the generating the at least one scan line includes generating a first set of scan lines including at least a first and second scan line, wherein the first and second scan lines have different orientations; and

wherein when operating in the second mode the generating the at least one scan line includes generating a second set of scan lines including at least one scan line, wherein the second set of scan lines includes less scan lines than the first set of scan lines; and

decoding the corresponding signals for reading the target optical code.

87. (New) The method according to Claim 86, wherein the generating at least one scan line includes:

generating light; and

redirecting the generated light.

88. (New) The method according to Claim 86, wherein the controlling the generating includes controlling at least one of the generating light and the redirecting the generated light.

89. (New) The method according to Claim 86, wherein the second set of scan lines includes at least two parallel scan lines.

90. (New) The method according to Claim 86, further comprising receiving a request signal, wherein the decoding is enabled in accordance with the request signal.

91. (New) The method according to Claim 86, further comprising:

generating a user request signal from one single-position actuator responsive to at least one user action; and

controlling at least one of the controlling the generating and the decoding in accordance with the user request signal.

92. (New) The method according to Claim 86, wherein the second set of scan lines include a subset of the first set of scan lines.

93. (New) The method according to Claim 86, wherein the second set of scan lines includes only one scan line.

94. (New) The method according to Claim 86, further comprising receiving a parameter for selecting the at least one scan line included in the second set of scan lines.

95. (New) An optical code scanning system for reading an optical code, said scanning system comprising:

a sensor module including a photo sensor array for sensing light reflected from at least a portion of the optical code and incident on the sensor module, and generating two-dimensional pixel data corresponding to the sensing; and

at least one processor comprising:

means for determining whether an orientation of data of the pixel data which corresponds to the optical code is within a predetermined orientation threshold range;

means for decoding the pixel data which corresponds to the optical code; and

means for enabling the decoding in accordance with a result of the determining.

96. (New) The scanning system according to Claim 95, the processor further comprising means for locating data of the pixel data corresponding to the optical code, wherein the determining by the means for determining comprises determining the orientation of the located data, and determining whether the determined orientation is within the predetermined orientation threshold range.

97. (New) The scanning system according to Claim 95, the at least one processor further comprising means for receiving a request signal, wherein the means for decoding is enabled in accordance with the request signal.

98. (New) The scanning system according to Claim 95, further comprising:

means for receiving a parameter request, wherein the predetermined orientation threshold range is selected in accordance with the received parameter request.

99. (New) The scanning system according to Claim 95, the at least one processor further comprising means for processing an input optical code read by the scanner system;

wherein the input optical code includes a parameter request; and

wherein the predetermined orientation threshold range is set in accordance with the parameter request.

100. (New) The scanning system according to Claim 95, wherein the predetermined orientation threshold range is defined by a range of angles relative to a predetermined axis.

101. (New) A method for reading an optical code comprising:

sensing light reflected from at least a portion of the optical code and incident on the sensor module;

generating two-dimensional pixel data corresponding to the sensing;

determining whether an orientation of data of the pixel data which corresponds to the optical code is within a predetermined orientation threshold range;

decoding the pixel data which corresponds to the optical code; and

enabling the decoding in accordance with a result of the determining.

102. (New) The method according to Claim 101, further comprising locating data of the pixel data corresponding to the optical code, wherein the determining comprises:

determining the orientation of the located data; and

determining whether the determined orientation is within the predetermined orientation threshold range.

103. (New) The method according to Claim 101, further comprising:

receiving a request signal; and

enabling the decoding in accordance with the request signal.

104. (New) The method according to Claim 101, further comprising receiving a parameter request, and selecting the predetermined orientation threshold range in accordance with the received parameter request.

105. (New) The method according to Claim 101, further comprising:

reading an input optical code, wherein the input optical code includes a parameter request; and

selecting the predetermined orientation threshold range in accordance with the parameter request.

106. (New) The method according to Claim 101, wherein the predetermined orientation threshold range is defined by a range of angles relative to a predetermined axis.

107. (New) An optical code scanner system comprising:

a sensor module including a photo sensor array for sensing light reflected from at least a portion of a target optical code and incident on the sensor module, and generating two-dimensional pixel data corresponding to the sensing; and

at least one processor comprising:

a decoder for decoding the pixel data for reading the target optical code;

means for determining whether an orientation of data of the pixel data which corresponds to the target optical code is within a predetermined orientation threshold range; and

means for operating the scanning system in at least a first and second mode, wherein:

when operating in the first mode the decoder decodes the target optical code regardless of a result of the determining by the means for determining; and

when operating in the second mode the decoder decodes the target optical code in accordance with the result of the determining by the means for determining.

108. (New) The scanner system according to Claim 107, wherein when operating in the second mode, the scanner system operates as a single line scanning system.

109. (New) The scanner system according to Claim 107:

wherein the at least first and second mode further includes a third mode; and

wherein the at least one processor processes a request for selecting the predetermined orientation threshold range when operating in the third mode.

110. (New) The scanner system according to Claim 107, wherein the at least one processor further comprises a means for processing a user input optical code read by the scanning system;

wherein the user input optical code includes at least one input request selected from the group consisting of a mode selection request and a parameter request; and

wherein the means for operating the scanning system operates in a selected mode of the at least first and second mode in accordance with the processing of the mode selection request, and the predetermined orientation threshold range is configured in accordance with the processing of the parameter request.

111. (New) The scanner system according to Claim 107, further comprising one single position actuator responsive to at least one user action for generating a user request signal; and

wherein the at least one processor further comprises means for controlling the means for operating the scanning system in at least the first and second mode and the decoder in accordance with the user request signal.

112. (New) A method for imaging an optical code comprising:

sensing light reflected from at least a portion of a target optical code and incident on the sensor module;

generating two-dimensional pixel data corresponding to the sensing;

decoding the pixel data for reading the target optical code;

determining whether an orientation of data of the pixel data which corresponds to an optical code is within a predetermined orientation threshold range;

operating in at least a first and second mode, wherein:

when operating in the first mode the decoding the pixel data is performed regardless of a result of the determining; and

when operating in the second mode the decoding the pixel data is performed in accordance with the result of the determining.

113. (New) The method according to Claim 112, wherein the at least first and second mode further includes a third mode; the method further comprising processing a request for selecting the predetermined orientation threshold range when operating in the third mode.

114. (New) The method according to Claim 112, further comprising:

processing a user input optical code read as a target optical code, wherein the user input optical code includes at least one input request selected from the group consisting of a mode selection request and a parameter request; and

the operating the scanner system in at least a first or second mode includes selecting a mode of the at least first and second mode in accordance with the processing of the mode selection request, and the predetermined orientation threshold range is configured in accordance with the processing of the parameter request.

115. (New) The method according to Claim 112, further comprising:

receiving a user request signal generated by one single position actuator responsive to at least one user action; and controlling the operating the scanning system in at least the first and second mode and the decoder in accordance with the user request signal.